



## *From the Chairman...*

This will be my last newsletter column as Chairman of the Section. It's been an interesting and exciting year, with activities continuing to pick up as the year has progressed. I appreciate the effort that has been provided by the other officers and directors, as well as other Section members who have stepped up to help.

This newsletter contains the ballot for electing officers and directors for the coming year, and the Nominating Committee has put together an exemplary slate. Please give the ballot your serious attention, and plan to attend the Awards and Installation Dinner on May 22<sup>nd</sup>.

I've mentioned before that it is the self-motivated work of individuals upon which the Section's success rests. I've noted several of those people, although I would not claim to ever have named everyone who deserves to be cited. I would like to add Todd Honeycutt to that list. Todd has sent out all of our email announcements for several years, and some of our activities would have suffered severely if we had not been able to have the rapid notification that email provides.

I appreciate the opportunity to have been the Chairman this past year, and I wish the new Board good luck and success. I look forward to seeing you on May 22<sup>nd</sup>.

---Arloe Mayne

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## **UPDATE Your Member Information... PLEASE!!**

Members can now update any of their personal information through the AIAA Headquarters Website!

- 1) Go to: <http://www.aiaa.org>
- 2) Click on MEMBERS ONLY, and enter your last name and member ID number. The click on GO.
- 3) Click on My Information. This will bring up a new screen with your member information.
- 4) Click on MAKE CHANGES. This will bring up a new screen. Now make any changes that are necessary.
- 5) When you are done, click ENTER CHANGES at the bottom of page. This will bring up a new screen that will inform you that changes have been made. In particular, keep those email addresses up-to-date! The accuracy of our email list is very important in order to get time-critical information out to the membership. So please update your membership profile. Thank you.

AIAA AL-MS Section. P.O. Box 7208. Huntsville, AL 35807

## **Precollege Outreach Committee**

The Precollege Outreach Committee invites you to celebrate 2003 with "100 Ways to Celebrate the Wright Brother's Flight". The handouts come from the workshop held at the Aerospace Science Conference in Reno this past winter, and can be downloaded from the AIAA Precollege page at <http://www.aiaa.org/education/index.hfm?edu=2>.

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## **Senior Member Upgrades**

To request upgrade information or nomination forms, contact AIAA Customer Service at 800/639-AIAA or 703/264-7500, or visit <http://www.aiaa.org>. Senior Members shall be persons who have demonstrated a successful professional practice in the arts, sciences, or technology of aeronautics or astronautics for the equivalent of at least eight (8) years.

## **Congratulations to our new Senior Members:**

**Mahesh V. Hosur**

**Terry G. Koelbl**

**Tina L. Melton**

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## **AIAA National Award Nominations**

AIAA is currently accepting nominations for several awards that have a July 1<sup>st</sup> nomination deadline. The specific awards under consideration, with their descriptions and nominee qualifications, are indicated on the AIAA HQ Website. To request a nomination form or additional information, please contact Aimée Petrognani, Honors and Awards Liaison, at 703/264-7623 or via e-mail at [aimeep@aiaa.org](mailto:aimeep@aiaa.org).

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## **AIAA Personal Line**

Check out the new AIAA 100% silk ties and other items just added to the AIAA store at:

<http://www.aiaa.org/store/category.cfm?LayerID=2>

Discounts available for Sections on selected items ordered in quantities 10 or more. For more information and to place Section orders, contact Ola Martin at [olam@aiaa.org](mailto:olam@aiaa.org) 310/643-7510.

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## **AIAA Events Schedule**

Visit the Bulletin section of Aerospace America or click on the URL below to view upcoming conferences and abstract submittals sponsored by AIAA.

<http://www.aiaa.org/calendar/index.hfm?cal=1>

## News from the Technical Director

### What are Technical and Program Committees?

This article (and the next) will focus on an aspect of AIAA that myself and several other section members that I know have been very active in for some time now; Technical Committees (known as TC's) and Program Committees (known as PC's). In this article I will describe what TC's and PC's are and what they do. I will first describe TC's.

TC's are the heart and muscle of AIAA's technical activities. These committees cover all technical interests of the AIAA. At this time there are 63 TC's. Each TC covers a specific scope of technology or a broader systems scope. They almost range in topics from A to Z; alphabetically the first on the list is Adaptive Structures and the last is Weapon System Effectiveness. All of the TC's come under the AIAA Vice President, Technical who heads up the Technical Activities Committee (TAC). The TAC is composed of seven groups each headed by a Technical Director. Each TC is in turn under a specific group. For example, the Structures TC is under the Structures, Design, and Test Group. TAC administers the activities of the TC's via the Technical Directors.

The members of each TC strive to serve institute members who have a special interest or professional stake in the scope of their respective TC. All TC members are volunteer agents from a professional sector that has a vital interest in the scope and purpose of a TC. In a broad sense, TC's identify the key issues within its field and the technical challenges to be faced in the three to five-year future. By identifying and discussing these issues and challenges, institute members as members of TC's are offered the opportunity to be in on the leading edge of the changes that are always present in their respective technical discipline.

TC's usually have two meetings per year. Many of these meetings are held in conjunction with an AIAA conference that a TC helps organize or is a conference where many members of a particular TC will be attending. A TC may have many projects being worked on simultaneously with the help of several subcommittees within the TC. The following is a generic list of typical projects:

- Organizing paper sessions for a conference and handling various conference administration functions.
- Conducting engineering/scientific presentations at a TC meeting.
- Developing technical aids such as educational videos for universities.
- Developing and promoting a position or white paper on a subject of critical importance to the members of a TC.
- Writing articles on topics of importance for publication in "Aerospace America".
- Developing short courses on topics specific to a TC and books for publication in the AIAA Progress Series.

So, how does one become a member of a TC? AIAA sends out solicitation letters inviting members of the technical community to submit nominations to TC's whose purpose and activities interest them. These letters are usually sent in August to TC Chairpersons, Section Chairpersons, Corporate Member representatives, industrial organizations, government agencies including DoD, and academic institutions. A nominee submits a biographical data form (the "Technical Committee Nomination Form") that is available from AIAA. Nominations are to be submitted by November. The chair for the specific TC a nominee is applying to reviews the biographical information supplied and selects nominees who have the appropriate background and interest that matches the goals and objectives of his or her TC. It should be pointed out the nomination form requires endorsement by an individual's immediate management to show that they will support attendance to the minimum two times per year TC meetings. Once selected to a TC, a person can remain on a TC usually for up to three years.

Now, what is a PC? PC's are similar to TC's and the above information is applicable to them as well with some differences. For example, TC's are usually limited to around 35 members and all members must be AIAA members. PC's do not have these limitations. The difference is that PC's have much broader scopes than TC's and involve members from numerous technical disciplines as opposed to usually one for TC members. For example, there is a Reusable Launch Vehicles PC and a Space Station PC.

I hope this article fully explains what TC's and PC's are and what they do. More information can be found on the AIAA web site. In my next article I will describe the projects I worked on as a member of the Structural Dynamics TC and what it is like to actually develop a new PC, the Gossamer Spacecraft PC. What is Gossamer? Believe me, it's a real word. Look it up. I will explain more in the next article.

--- John Lassiter

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## JUST A REMINDER...

**Associate Fellow references are due by May 15.**

**Fellow and Honorary Fellow nominations are due by June 15.**

**Fellow and Honorary Fellow references are due by July 15.**

## Alabama-Mississippi Section Officer/Board Elections

### \*\*\*\*\* ELECTION BALLOT \*\*\*\*\*

Greetings AL-MS Section Members. It is time to elect the 2003-04 AL-MS Section Officers and Board Members. The positions for election are: Chairman, Vice-Chairman, Secretary, Treasurer, and three voting positions on the Board of Directors.

To vote, please follow the instructions:

1) Enter your AIAA membership number below.

# \_\_\_\_\_

2) Mark ( "X" ) your candidate choices below.

3) Mail ballot to: AIAA AL-MS Section                      OR                      Return by fax at (256) 544-3151  
Attn: Election Committee                      Attn: Wanda Reece  
P.O. Box 7208                      AIAA AL-MS Section  
Huntsville, AL 35807

**NOTE: Your ballots must be in the hands of the Election Committee by May 16, 2003.**

#### \*\*\*\*\* THE CANDIDATES \*\*\*\*\*

CHAIRMAN (select one)

\_\_\_\_\_ Mr. Steven R. Noneman                      \_\_\_\_\_ Write-in candidate

VICE-CHAIRMAN (select one)

\_\_\_\_\_ Mr. Joseph D. Sims                      \_\_\_\_\_ Write-in candidate

SECRETARY (select one)

\_\_\_\_\_ Ms. Melissa Van Dyke                      \_\_\_\_\_ Write-in candidate

TREASURER (select one)

\_\_\_\_\_ Mr. Kevin P. Higdon                      \_\_\_\_\_ Write-in candidate

BOARD OF DIRECTORS – MEMBERSHIP (select one)

\_\_\_\_\_ Dr. Ann F. Whitaker                      \_\_\_\_\_ Write-in candidate

BOARD OF DIRECTORS - HONORS & AWARDS (select one)

\_\_\_\_\_ Mr. Stephen A. Cook                      \_\_\_\_\_ Write-in candidate

BOARD OF DIRECTORS - PUBLIC POLICY (select one)

\_\_\_\_\_ Mr. Carl Case                      \_\_\_\_\_ Mr. George M. Lide

\_\_\_\_\_ Write-in candidate

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Place  
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**AIAA AL-MS Section**  
**Attn: Election Committee**  
**P.O. Box 7208**  
**Huntsville, AL 35807**

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## Candidate Information

**Chairman: Mr. Steven R. Noneman**

Steven Noneman is the Operations Analysis Lead Engineer for the Space Launch Initiative (SLI) at NASA's Marshall Space Flight Center (MSFC). In this capacity, he is leading a NASA-wide team of operations experts analyzing SLI architectures and technologies. He chairs the Operations Analysis Working Group. Mr. Noneman has over 28 years of experience at NASA. His career at MSFC began as an Aerospace engineering co-op student from the University of Cincinnati. During his NASA career, he was a payload flight controller on the Spacelab-1 and Spacelab-3 Shuttle missions and was an ASTRO-1 Payload Operations Director for the first Spacelab payload mission controlled from Huntsville. He was the Space Station Payload Operations Integration lead, Chief of the Training Branch, and assistant lead for the Training and Crew Operations Group. He is an author of several papers and NASA technical memorandums on payload mission operations and training. He has participated in the Space Station Utilization Conference, World Space Congress, Space Operations Conferences, and Inter-service/Industry Training, Simulation, and Education conferences. He is a senior member of the AIAA, Honors and Awards Director for the AIAA AL-MS Section, and a member of the AIAA Space Operations and Support Technical Committee. Mr. Noneman received a MS degree in Systems Engineering from University of Alabama in Huntsville in 1984. He was raised in Findlay, Ohio and resides in Madison, Alabama with his wife, Candace, and 3 children.

**Vice-Chairman: Mr. Joseph D. Sims**

Joe Sims is currently a Propulsion Engineer for the Combustion Devices Functional Design team at NASA's Marshall Space Flight Center (MSFC). He is involved in research and development tests supporting the Integrated Powerhead Demonstrator, the Boeing/Rocketdyne Hypergolic Injector, both TRW and Aerojet LOX/Ethanol thrusters, and several university-led tasks under the Next Generation Launch Technology (NGLT) program. He has been at MSFC since September 1999, and previously was employed by Lockheed Martin Astronautics and Stone Engineering Company, both in Huntsville, AL. Mr. Sims has previously served as President of the AIAA UAH Student Section (1994-95), and as Pre-College Outreach Director (1998-2000) and Treasurer (2001) for the AL-MS Section. He is a member of the Pi Tau Sigma, Tau Beta Pi, and Omicron Delta Kappa honor societies. He holds BS (1995) and MS (2000) degrees in Engineering from the University of Alabama in Huntsville, where he also continues working toward a Ph.D. in Aerospace Engineering (2004). He resides in Madison, AL with his wife, Deborah, and their son, Jason.

**Treasurer: Mr. Kevin P. Higdon**

Mr. Higdon has 6 years of work experience in the fields of Mechanical and Aerospace Engineering. He received his Bachelor of Mechanical Engineering degree from Auburn University in June 1996. Upon graduation, he accepted a Process Engineer position with Milliken & Company in LaGrange, GA where he conducted process and mechanical engineering projects in the manufacturing of automotive textiles. Mr. Higdon worked with Milliken & Company from June 1996 until June 1999, at which time he accepted a position as a Systems Engineer for Coleman Research Corporation in Huntsville, AL. His work with Coleman Research consisted of support to the US Army THAAD Systems Engineering and Technical Assistance Group in the areas of Systems Engineering, Test, Missile 6-DOF simulations, and Missile Boost Motor Integrated Product Team. Mr. Higdon will finish his MS degree in Aerospace Propulsion from the University of Alabama in Huntsville this summer. Mr. Higdon recently founded KPH Research, Inc. His current responsibilities include technical and analytical support for the THAAD missile defense program.

**Secretary: Ms. Melissa Van Dyke**

Melissa Van Dyke is with the Propulsion Research Center of NASA's Marshall Space Flight Center (MSFC) Space Transportation Directorate. She is responsible for the early flight fission test facilities at MSFC, as well as for test articles that simulate fission system. As the lead for developing a Phase 1 fission propulsion flight demonstrator at MSFC, Ms. Van Dyke is responsible for formulating and executing a multi-year, multi-disciplinary testing program which addresses every aspect of a proposed Phase 1 flight demonstrator through non-nuclear ground testing (reactor, shielding, power conversion, spacecraft design, thermal management, electric propulsion, heat exchangers, radiators, and cryogenic fluid management systems). This effort has significantly contributed to NASA's progress toward the development of space fission propulsion systems. Ms. Van Dyke has also been the technical lead on various experiments related to cryogenic fluid management, and has served a lead on various aspects of solid rocket and hybrid rocket propulsion development. She has also been a lead on past space transportation studies. In 2001, she was the AL-MS Section Aerospace Engineer of the Year. A volunteer at AIAA sponsored events, Ms. Van Dyke has previously served as the Section's Newsletter Editor.

**Board of Directors - Membership: Dr. Ann F. Whitaker**

Dr. Whitaker is the Director of the Science Directorate at MSFC. She specializes in the physics of materials including lubrication, surface physics, organic semiconductors, non-destructive evaluation, and space environmental effects on materials. She has served as Principal Investigator on several flight experiments. Previously, she has held positions as Chief of the Engineering Physics Division, Chief of the Project and Environmental Engineering Division, Deputy Director of the Space Sciences Laboratory, Director of the Materials and Processes Laboratory, and Manager of the Materials, Processing and Manufacturing Department. She has received the Presidential Rank Meritorious Executive Award, NASA Exceptional Engineering Achievement Medal, NASA Exceptional Service Medal, and was the MSFC nominee for the Women in Science and Engineering (Lifetime) Achievement Award. Dr. Whitaker received a BS degree in Physics from Berry College, a MS degree in Physics from the University of Alabama in Huntsville, and a Ph.D. in Materials Engineering from Auburn University.

**Board of Directors - Honors and Awards: Mr. Stephen A. Cook**

Mr. Cook is Deputy Manager for the NASA/MSFC Advanced Space Transportation Program (ASTP) Office. The ASTP, as NASA's "Technology Central" for future space transportation systems, is developing innovative technologies needed for ultra low-cost space transportation systems as safe and reliable as today's airliners. Intense research efforts and technology development are aimed toward accelerating breakthroughs that will make it possible for people to live, work and play on the space frontier. The ASTP leads a team of NASA centers, U.S. Government agencies, industry and academia focused on products and developing a variety of propulsion and vehicle technologies. Technology development is concentrated in the areas of hypersonic transportation, travel beyond low-Earth orbit, and advanced concepts research. The ASTP's primary emphasis is on technologies for 3rd Generation RLVs that could be operational in a 2025 timeframe. It is also investigating technologies for a 4th Generation RLV that could be operational in the 2040 timeframe. The ASTP is developing technologies to decrease the trip times and reduce the weight of the propulsion systems required for planetary missions, and even bolder missions to the edge of our solar system and beyond. Electrodynamics tethers, space sails, aeroassist and high-power electric propulsion are just a few of the technologies under development. The ASTP is also conducting fundamental research on the cutting edge of modern science and engineering, including fission, fusion and antimatter propulsion.

**Board of Directors - Public Policy: Mr. Carl Case**

Mr. Case is a newly retired Associate Fellow. He has spent 25 years at Boeing in software, systems engineering, and engineering management mostly on spacecraft systems. Mr. Case has authored about 15 technical papers; and served on the AIAA Space Operations & Support Technical Committee (SOSTC), including serving as the committee's Chairman, and on the Space Systems Technical Committee (SSTC).

**Board of Directors - Public Policy: Mr. George M. Lide**

Mr. Lide is Vice President of the Advanced Technology Division (formerly Control Dynamics Division) of bd Systems Inc. He manages the bd Systems Huntsville Office and a significant contract base, including NASA and the U.S. Army. This includes contracts with NASA/MSFC for 6-DOF mathematics model development and simulation support; design, analysis real-time simulation for Space Station; and development/checkout of the Station common berthing mechanism and manual berthing mechanism. The bd Systems Inc. also provides MSFC with space solar power multi-body dynamics modeling. Systems Engineering and Test Support is also provided to the U.S. Army Patriot Project Office in support of their role to build and deploy the Patriot Tactical command system. This system supports the Automated Force Operations and Air Battle Management at the Battalion, Brigade and Air and Missile Defense Task Force (AMDTF) Echelons. This support is provided via subcontract to Perkins Technical Services and includes the design, development and integration of joint services data links for interfaces into the digital battlefield and for joint services interoperability testing and certification as mandated by the Chairman Joint Chiefs of Staff. bd Systems is also conducting IRAD for neural network control system development.

### 2002-03 Section Officers and Board of Directors

Position	Name	Business Phone	E-mail Address
Chairman	Arloe W. Mayne, Ph.D	256/881-7124	ArloeWJr@cs.com
Vice Chairman	Thomas M. Hancock	256/722-5555	tom.hancock@msfc.nasa.gov
Secretary	Wanda G. Reece	256/544-2630	wanda.reece@msfc.nasa.gov
Treasurer	Syri Jo Koelfgen	256/544-1870	Syri.J.Koelfgen@msfc.nasa.gov
Membership	Victor J. Giuliano	256/721-2422	victor.giuliano@pw.utc.com
Education	Kevin S. Connell	256/782-5972	kconnell@jsucc.jsu.edu
Public Policy	John R. London	256/544-0914	john.london@msfc.nasa.gov
Honors & Awards	Steven R. Noneman	256/544-2048	steven.noneman@msfc.nasa.gov
Young Professional	Allison Cash	256/650-2738	Allison.Cash@itt.com
Technical	John Lassiter	256/544-3022	John.O.Lassiter@msfc.nasa.gov
Career Enhancement	J. Wayne McCain, Ph.D.	256/233-6501	drwayne@athens.edu
Pre-College Outreach	Victor J. Giuliano	256/721-2422	giuliano@pwfl.com
E-mail Coordinator & Webmaster	Todd Honeycutt	256/430-0753	thoneycutt@stslc.com
Newsletter	Gordon A.(Alan) Lowrey	256/544-7684	gordon.lowrey@ums.msfc.nasa.gov
Evolution of Flight	Alfred M. Wright	256/876-8037	alfred.wright@rdec.redstone.army.mil
National/RAC	Bobby G. Noblitt	256/461-1993	BobNoblitt@msn.com
Supernumerary	Earl H. Pearce	205/467-6349	epearce@alltel.net
Mailings	Eddie T. Lawhorn	256/880-2062	eddie.lawhorn@hsv.boeing.com
Previous Section Chair	Gordon A.(Alan) Lowrey	256/544-7684	gordon.lowrey@ums.msfc.nasa.gov
2000-2001 Section Chair	Robert (Bob) L. Sackheim	256/544-1938	bob.sackheim@msfc.nasa.gov

AIAA AL-MS Section  
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***Serving the Aerospace and Aeronautics Professional...Defending the American Dream!***

\*\*\* **URGENT!** Election Ballot Enclosed! Election Committee must have ballots by May 16, 2003.\*\*\*  
UPCOMING: May 22, 2003 - AL-MS Section Awards Dinner, Radisson Suite Hotel, Huntsville, AL.